B1 Cont

$$(Y)_{p}$$

$$(X)_{p}$$

$$(X)_$$

X is -O- or -S-;

p is 1 or 2;

Y is hydrogen, lower alkyl, hydroxy, chlorine, fluorine, bromine, iodine, lower alkoxy, trifluoromethyl, nitro, or amino, when p is 1;

Y is lower alkoxy[, hydroxy and halogen], when p is 2 and X is -O-;

 $[(R_1) \text{ is } R_{20}, R_{21}, \text{ or } R_{22}, \text{ wherein:}$

 R_{20} is -(CH₂)_n- where] n is 2, 3, 4 or 5;

 $[R_{21} is$

-CH₂-CH=CH-CH₂-,

-CH₂-C \equiv C-CH₂-,

-CH₂-CH=CH-CH₂-CH₂-,

-CH₂-CH₂-CH=CH-CH₂-,

-CH₂C \equiv C-CH₂-CH₂-, or

B1 Cont

$$-CH_2-CH_2-C = C-CH_2-$$

the -CH=CH- bond being cis or trans;

 R_{22} is R_{20} or R_{21} in which one or more carbon atoms of R_{20} or R_{21} are substituted by at least one C_1 - C_6 linear alkyl group, phenyl group or

where Z₁ is lower alkyl, -OH, lower alkoxy, -CF₃, -NO₂, -NH₂ or halogen;]

R is hydrogen, lower alkyl, lower alkoxy, hydroxyl, carboxyl, chlorine, fluorine, bromine, iodine, amino, lower mono or dialkylamino, nitro, lower alkyl thio, trifluoromethoxy, cyano, acylamino, trifluoromethyl, trifluoroacetyl, aminocarbonyl, [monoalkylaminocarbonyl, dialkylaminocarbonyl, formyl,]

-C(=O)-alkyl, -C(=O)-O-alkyl, -C(=O)-aryl, -C(=O)-heteroaryl, or

-CH(OR₇)-alkyl;[-CH(OR⁷)-alkyl, -C(=W)-alkyl, -C(=W)-aryl, and
-C(=W)-heteroaryl;]

alkyl is lower alkyl;

aryl is phenyl or

where R₅ is hydrogen, lower alkyl, lower alkoxy, hydroxy, chlorine, fluorine, bromine,

Bond

iodine, lower monoalkylamino, [lower dialkylamino,] nitro, cyano, trifluoromethyl, trifluoromethoxy;

heteroaryl is



 Q_3 is -O-, -S-, -N $H_{\overline{\lambda}}$, or -CH=N-;

[W is CH2 or CHR8 or N-R9;]

R₇ is hydrogen, lower alkyl, or acyl;

[R₈ is lower alkyl;

 R_9 is hydroxy, lower alkoxy, or -NHR $_{10}$; and

R₁₀ is hydrogen, lower alkyl, C₁-C₃ acyl, axyl,

-C(=O)-aryl or -C(=O)-heteroaryl,

where aryl and heteroaryl are as defined above;] and

m is 1, 2, or 3;

[all geometric, optical and stereoisomers thereof,] or a pharmaceutically acceptable acid addition salt thereof.



26. (Amended) A compound as claimed in claim 1, [which is 1-[4-[3-[4-(6-fluoro-1,2-benzisoxazol-3-yl]-1-piperidinyl]-propoxy]-3-methylmercaptophenyl]ethanone or] which is 1-[4-[3-[4-(6-fluoro-1,2-benzisoxazol-3-yl)-1-piperidinyl]-propoxy]-3-

methylmercaptophenyl]ethanone or a pharmaceutically acceptable acid addition salt thereof.

B2

- 52. (Amended) A compound as claimed in claim [1] 132, which is N,N-dimethyl-4-[3-[4-(6-fluoro-1,2-benzisoxazol-3-yl)-1-piperidinyl]propoxy]-3-methoxybenzamide, or a pharmaceutically acceptable acid addition salt thereof.
- 53. (Amended) A compound as claimed in claim [1] 132, which is 1-[4-[3-[4-(6-fluoro-1,2-benzisoxazol-3-yl)-1-piperidinyl]-propoxy]-3-methoxyphenyl]ethanone oxime, or a pharmaceutically acceptable acid addition salt thereof.
- 54. (Amended) A compound as claimed in claim [1] 132, which is 1-[4-[3-[4-(6-fluoro-1,2-benzisoxazol-3-yl)-1-piperidinyl]-propoxy]methoxyphenyl]ethanone oxime O-methyl ether, or a pharmaceutically acceptable acid addition salt thereof.
- 55. (Amended) A compound as claimed in claim [1] 132, which is 1-[4-[3-[4-(6-fluoro-1,2-benzisoxazol-3-yl)-1-piperidinyl]-propoxy]-3-methoxyphenyl]ethanone hydrazone, or a pharmaceutically acceptable acid addition salt thereof.
- 56. (Amended) A compound as claimed in claim [1] 132, which is 6-fluoro-3-[1-[3-[2-methoxy-4-(1-methylethenyl)phenoxy]-propyl]-4-piperidinyl]-1,2-benzisoxazole, or a pharmaceutically acceptable acid addition salt thereof.
- 57. (Amended) A compound as claimed in claim [1] <u>87</u>, which is (Z)-1-[4-[4-[4-(6-fluoro-1,2-benzisoxazol-3-yl)-1-piperidinyl]-2-butenyl]oxy]-3-methoxyphenyl]ethanone, or a pharmaceutically acceptable acid addition salt thereof.

-B3

- 58. (Amended) A compound as claimed in claim [1] <u>87</u>, which is (E)-1-[3-[4-[[4-(6-fluoro-1,2-benzisoxazol-3-yl)-1-piperidinyl]-2-butenyl]oxy]-4-hydroxyphenyl]ethanone, or a pharmaceutically acceptable acid addition salt thereof.
- 59. (Twice Amended) A compound [as claimed in claim 1], which is (E)-1-[3-[4-[4-(6-fluoro-1,2-benzisoxazol-3-yl)-1-piperidinyl]-2-butenyl]oxy]-4-benzyloxyphenyl]ethanone, or a pharmaceutically acceptable acid addition salt thereof.

 \mathcal{B}^{4}

- 65. (Twice Amended) A compound as claimed in claim [1, which is 1-(R)-(-)-[4-[3-(6-fluoro-1,2-benzisoxazol-3-yl)-1-piperidinyl]-2-methyl-1-propoxy]-3-methoxyphenyl]ethanone, or] 104, which is 1-(R)-(-)-[4-[3-[4-(6-fluoro-1,2-benzisoxazol-3-yl)-1-piperidinyl]-2-methyl-1-propoxy]-3-methoxyphenyl]ethanone, or a pharmaceutically acceptable acid addition salt thereof.
- 66. (Amended) A compound as claimed in claim [1] 104, which is 1-(S)(+)-[4-[3-[4-(6-fluoro-1,2-benzisoxazol-3-yl)-1-piperidinyl]-2-methyl-1-propoxy]-3-methoxyphenyl]ethanone, or a pharmaceutically acceptable acid addition salt thereof.

 $-B^{5}$

74. (Amended) The compound of claim 1, wherein p is 2, X is -O-, and Y is [selected from the group consisting of] lower alkoxy[, hydroxy and halogen groups].

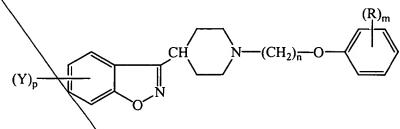
B6

77. (Amended) The compound of claim 1, wherein R is selected from the group consisting of hydrogen, C₁-C₃ alkyl, C₁-C₃ alkoxy, hydroxyl, -COCF₃, C₁-C₆ alkanoyl, Cl, F, Br,

B6

 $\overline{78}$. (Amended)

A compound of the formula:



50/2

wherein p is 1 or 2;

Y is hydrogen, Cl, Br, or F, when p is 1;

Y is lower alkoxy[, hydroxy, or halogen] when p is 2;

n is 2, 3, or 4;

R is hydrogen, C₁-C₃ alkyl, C₁-C₃ alkoxy, hydroxyl, alkanoyl, Cl, F, Br, I, amino,

C₁-C₃ mono or dialkyl amino, acylamino, -NO₂, -OCF₃, -CF₃, alkyl-C(=O)-,

 CF_3 -C(=O)-, or - $CH(OR_7)$ -alkyl;

alkyl is lower alkyl;

 R_7 is hydrogen, lower alkyl, lower alkyl-C(=O)-, or CF_{37} C(=O)-;

and m is 1, 2, or 3;

all geometric, optical and stereoisomers thereof or a pharmaceutically acceptable acid addition salt thereof.

79.

(Twice Amended)

A compound of the formula:

$$(Y)_p$$
 CH $N-(CH_2)_n-O$

wherein p is 1 or 2;

Y is hydrogen, Cl, Br, or F, when p is 1;

Y is lower alkoxy[, hydroxy, or halogen] when p is 2;

n is 2, 3, or 4;

R is hydrogen, C₁-C₃ alkyl, C₁-C₃ alkoxy, hydroxyl, acyl, alkanoyl, Cl, F, Br, I, amino, C₁-

C₃ mono or dialkyl amino, acylamino, -NO₂, -OCF₃, -CF₃, alkyl-C(=O)-,

 CF_3 -C(=O)-, or - $CH(OR_7)$ -alkyl;

alkyl is lower alkyl;

 R_7 is hydrogen, lower alkyl, [or] lower alkyl-C(=O)-, or CF₃-C(=O)-;

and m is 1, 2, or 3;

80.

all geometric, optical and stereoisomers thereof or a pharmaceutically acceptable acid addition salt thereof.

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X is -O- or -S-;

p is 1 or 2;

Y is hydrogen, lower alkyl, hydroxy, chlorine, fluorine, bromine, iodine, lower alkoxy, trifluoromethyl, nitro, or amino, when p is 1;

Y is lower alkoxy, hydroxy and halogen when p is 2 and X is -O-;

 (R_1) is R_{20} , R_{21} , or R_{22} , wherein:

 R_{20} is -(CH₂)_n-, where n is 2, 3, 4 or 5;

R₂₁ is

-CH₂-CH¹CH-CH₂-,

-CH₂-C **=**C-CH₂-,

 $-CH_2-CH=CH-CH_2-CH_2-$

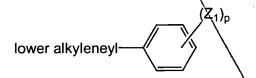
 $-CH_2-CH_2-CH=CH^2-CH_2-$

-CH₂-C≡C-CH₂-CH₂-, or

-CH₂-CH₂-C ≡C-CH₂-,

the -CH=CH- bond being cis'or trans;

 R_{22} is R_{20} or R_{21} in which one or more carbon atoms of R_{20} or R_{21} are substituted by at least one C_1 - C_6 linear alkyl group, phenyl group or



where Z_1 is lower alkyl, -OH, lower alkoxy, -CF₃, -NO₂, -NH₂ or halogen; and R and m are as defined hereinafter;

m is 1, 2, or 3; and

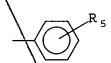
 B^{6} C^{2} cont

when m is 1, 2, or 3, R is hydrogen, lower alkyl, lower alkoxy, hydroxyl, carboxyl, chlorine, fluorine, bromine, iodine, amino, lower mono or dialkylamino, nitro, lower alkyl thio, trifluoromethoxy, cyano, acylamino, trifluoromethyl, trifluoroacetyl, aminocarbonyl, monoalkylaminocarbonyl, dialkylaminocarbonyl, formyl,

-C(=O)-alkyl, -C(=O)-O-alkyl, -C(=O)-aryl, -C(=O)-heteroaryl, -CH(OR^7)-alkyl, -C(=W)-alkyl, -C(=W)-aryl, and -C(=W)-heteroaryl;

alkyl is lower alkyl;

aryl is phenyl or



where R₅ is hydrogen, lower alkyl, lower alkoxy, hydroxy, chlorine, fluorine, bromine, iodine, lower monoalkylamino, lower dialkylamino, nitro, cyano, trifluoromethyl, trifluoromethoxy;

heteroaryl is

$$Q_3$$

Q₃ is -O-, -S-, -NH-, <u>or</u> -CH=N-;

W is CH₂ or CHR₈ or N-R₉;

R₇ is hydrogen, lower alkyl, or acyl;

R₈ is lower alkyl;

R₉ is hydroxy, lower alkoxy, or -NHR₁₀; and

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 R_{10} is hydrogen, lower alkyl, C_1 - C_3 acyl, aryl,

-C(=O)-aryl or -C(=O)-heteroaryl,

where aryl and heteroaryl are as defined above; and]

with the proviso that when m is 3, R is not -C(=O)-heteroaryl[, or -C(=W)-heteroaryl;],

[all geometric, optical and stereoisomers thereof,] or a pharmaceutically acceptable acid addition salt thereof.

- 81. (Amended) A compound as claimed in claim [1] <u>87</u>, which is (E)-1-[4-[4-(6-fluoro-1,2-benzisoxazol-3-yl)-1-piperidinyl]-2-butenyl]oxy]-3-methoxyphenyl]ethanone, or a pharmaceutically acceptable acid addition salt thereof.
- 82. (Amended) A pharmaceutical composition, which comprises <u>a</u> compound as claimed in any one of claims [1-81] <u>1-75 and 77-81</u>, and a pharmaceutically acceptable carrier therefor.
- 83. (Amended) An antipsychotic composition which comprises a compound as claimed in any one of claims [1-81] 1-75 and 77-81, in an amount sufficient to produce an antipsychotic effect, and a pharmaceutically acceptable carrier therefor.
- 84. (Amended) A method of treating psychoses, which comprises administering to a mammal a psychoses-treating effective amount of a compound as claimed in any one of claims [1-81] 1-75 and 77-81.

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- 85. (Amended) An analgesic composition which comprises a compound as claimed in any one of claims [1-81] 1-75 and 77-81, in an amount sufficient to produce a pain-relieving effect, and a pharmaceutically acceptable carrier therefor.
- 86. (Amended) A method of alleviating pain, which comprises administering to a mammal a pain-relieving effective amount of a compound as claimed in any one of claims [1-81] 1-75 and 77-81.

Please amend claims 98, 114, 132, and 142, all added in the Preliminary Amendment dated November 15, 2000, as follows:

B7

98. The compound of claim 87, wherein R is selected from the group consisting of hydrogen, C₁-C₃ alkyl, C₁-C₃ alkoxy, hydroxyl, -COCF₃, C₁-C₆ alkanoyl, Cl, F, Br, I, C₁-C₃

alkylamino, -NO2, -CF3, -OCF3, and -C-lower alkyl.

B8

114. The compound of claim 104, wherein R is selected from the group consisting of hydrogen, C₁-C₃ alkyl, C₁-C₃ alkoxy, hydroxyl, -COCF₃, C₁-C₆ alkanoyl, Cl, F, Br, I, C₁-C₃

alkylamino, -NO₂, -CF₃, -OCF₃, and -C-lower alkyl.

B9 pub 132. A compound of the formula

wherein

X is -O- or -S-;

p is 1 or 2;

Y is hydrogen, lower alkyl, hydroxy, chlorine, fluorine, bromine, iodine, lower alkoxy, trifluoromethyl, nitro, or amino, when p is 1;

Y is lower alkoxy, hydroxy, or halogen when p is 2 and X is -O-;

n is 2, 3, 4 or 5;

R is hydrogen, lower alkyl, lower alkoxy, hydroxyl, carboxyl, chlorine, fluorine, bromine, iodine, amino, lower mono or dialkylamino, nitro, lower alkyl thio, trifluoromethoxy, cyano, acylamino, trifluoromethyl, trifluoroacetyl, aminocarbonyl, dialkylaminocarbonyl, formyl,

-C(=O)-alkyl, -C(=O)-heteroaryl,

-CH(OR₇)-alkyl, -C(=W)-alkyl, -C(=W)-aryl, or -C(=W)-heteroaryl;

alkyl is lower alkyl;

aryl is phenyl or

B9 C5

where R₅ is hydrogen, lower alkyl, lower alkoxy, hydroxy, chlorine, fluorine, bromine,

iodine, lower monoalkylamino, nitro, cyano, trifluoromethyl, trifluoromethoxy;

heteroar lis



 Q_3 is -O-, -S-, -NH-, δr -CH=N-;

W is CH₂ or CHR₈ or N-R₉;

R₇ is hydrogen, lower alkylor acyl;

R₈ is lower alkyl;

R₉ is hydroxy, lower alkoxy, or -NHR₁₀; and

R₁₀ is hydrogen, lower alkyl, C₁-C₃ acyl, aryl,

-C(=O)-aryl or -C(=O)-heteroaryl,

where aryl and heteroaryl are as defined above; and

m is 1, 2, or 3;

with the proviso that at least one R is selected from the group consisting of

dialkylaminocarbonyl, formyl, -C(=W)-alkyl, -C(=W)-aryl, and

-C(=W)-heteroaryl;

all geometric, optical and stereoisomers thereof, or a pharmaceutically acceptable acid

addition salt thereof.